### **ENVIRONMENTAL CHEMISTS**

Date of Report: 01/12/99 Date Received: 12/22/98

Project: Metro Self Monitor, PO# M77971

Date Samples Extracted: 01/08/99 Date Extracts Analyzed: 01/11/99

## RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, ZINC USING METHOD 6010

# Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

Sample ID	<u>Chromium</u>	Copper	<u>Nickel</u>	Zinc
M77971	0.42	0.24	0.31	<0.05
Method Blank	< 0.05	< 0.05	< 0.05	< 0.05

### **ENVIRONMENTAL CHEMISTS**

Date of Report: 01/12/99 Date Received: 12/22/98

Project: Metro Self Monitor, PO# M77971

## QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 812122-01 (Duplicate)

				Relative	
	Reporting	Sample	Duplicate	Percent	Acceptance
Analyte	Units	Result	Result	Difference	Criteria
Chromium	mg/L (ppm)	0.42	0.46	9	0-20
Copper	mg/L (ppm)	0.24	0.28	15	0-20
Nickel	mg/L (ppm)	0.31	0.31	0	0-20
Zinc	mg/L (ppm)	< 0.05	< 0.05	nm	0-20

Laboratory Code: 812122-01 (Matrix Spike)

		Reporting	Spike	Sample	% Recovery	% Recovery	Acceptance	
٠.	Analyte	Units	Level	Result	MS	MSD	Criteria	RPD
	Chromium	mg/L (ppm)	5	0.42	104	101	80-120	3
	Copper	mg/L (ppm)	5	0.24	101	95	80-120	6
	Nickel	mg/L (ppm)	10	0.31	104	102	80-120	2
	Zinc	mg/L (ppm)	5	< 0.05	109	105	80-120	4

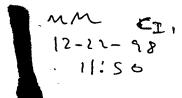
Laboratory Code: Laboratory Control Sample

	Reporting	Spike	% Recovery	% Recovery	Acceptance		
Analyte	Units	Level	LCS	LCSD	Criteria	$\operatorname{RPD}$	
Chromium	mg/L (ppm)	5	103	102	80-120	1	
Copper	mg/L (ppm)	5	102	101	80-120	1	
Nickel	mg/L (ppm)	10	102	103	80-120	1	
Zinc	mg/L (ppm)	5	103	103	80-120	0	

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

#812122

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282



# SAMPLE CHAIN OF CUSTODY

Company / WAS	Caro	m Wocks		$C \rightarrow I$
	can lobbe	m Ococks	Con	tace Genous Thompson
City, State, Zip South		8134		
Phone # (206) 337-8		FAX #_ (Za	() 38-2-430°	Date 12-27-8
				Date 12-22 B
SITE NO.		PROJECT		PURCHASE ORDER #
7278		metro Solf	moniter	M77971
SAMPLERS (signature)				PROJECT LOCATION
5				5200 6th Ave 5,
REMARKS				SAMPLE DISPOSAL INFORMATION
				Dispose after 30 days
				Return Samples
				Call for Instructions
Commin #	Date/Time		# of Lab	
Sample #	Sampled		Jars Sample	
m77971	1422/80 10100	1420	1 01	CK CU NI ZW
		·		
	100			
SIGNATURE Reling ished by:	P:	RINT NAME	COMPA	NY Date Time
XIII STATE OF THE	= GENSG	Thompson	ACL	J 12/22/20 10:30 Am
Received by 1		IEL MARTI	ACL FABA	12/22/98 10:30 Am
Remarkated by:	1,7,			, , , , , , , , , , , , , , , , , , , ,
Received by:				
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FORMS/COC

11/07/98

#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

January 12, 1999

### **DUPLICATE COPY**

### INVOICE #99ACU0112-2

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M77971: Results of testing requested by Gerry Thompson for material submitted on December 22, 1998.

FEDERAL TAX ID (b) (6)

### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

January 12, 1999

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on December 22, 1998 from your Metro Self Monitor, PO# M77971 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Marauel Marti Project Manager

Enclosures ACU0112R.DOC